

REMARKS

This Response is to the non-final Office Action dated September 6, 2011. Claims 1 to 53 and 58 are pending. Claims 54 to 57 were previously canceled without disclaimer. Please charge Deposit Account No. 02-1818 for any fees owed in connection with this Response.

In the Office Action, claims 1 to 9, 13 to 25, 29 to 50 and 58 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,641,533 to Causey III et al. ("*Causey*"), in view of U.S. Patent No. 6,564,104 to Nelson et al. ("*Nelson*"). Claims 10 to 12, 26 to 28 and 51 to 53 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Causey*, in view of *Nelson*, and further in view of U.S. Publication No. 2002/0038392 to De la Hueraga ("*De la Hueraga*") and further in view of U.S. Patent No. 6,795,421 to Heinonen et al. ("*Heinonen*").

Regarding the obviousness rejection over *Causey* and *Nelson*, independent claim 1 is directed to a system for reporting upon integrity of a wireless communication link within a healthcare facility including:

software configured to report upon the integrity of the wireless communication link by: (i) sending a signal to the wireless communication link, (ii) waiting a predetermined amount of time for a response to the signal sent to the wireless communication link, and (iii) generating a time-out output that indicates loss of the wireless communication link when the response is not received within the predetermined amount of time. (emphasis added).

Applicants respectfully submit that *Causey* and *Nelson*, alone and in combination, fail to disclose or suggest the system of claim 1 including a wireless remote device having software configured to report upon the integrity of a wireless link by: (i) sending a signal to the wireless link (ii) waiting a predetermined amount of time for a response to the signal sent to the wireless link, and (iii) generating a time-out output that indicates loss of the wireless link when the response is not received within the predetermined amount of time.

The Office Action at page 3 cites to *Nelson* for the teaching of a wireless remote device having software configured to report on the integrity of a wireless link by performing (i), (ii) and (iii) above. In particular, the Office Action at pages 3 and 4 cites to *Nelson* at: (a) column 20, lines 30 to 47; (b) column 19, line 62 to column 20, line 6; and (c) and column 20 lines 48 to 57 for the disclosure of the wireless remote device having software configured to report on the integrity of a wireless link by performing (i), (ii), and (iii) of claim 1. However, for the reasons discussed below, Applicants respectfully disagree and submit that none of the cited passages of

Nelson (nor any other passage of *Nelson*) discloses or suggests a wireless remote device with software configured to report upon the integrity of a wireless communication link by performing (i), (ii), and (iii) of claim 1.

Regarding the Office Action's citation to column 20, lines 30 to 47 of *Nelson* (indicated at (a) above), the citation discloses:

For example, the functions of IMDNI 116 of FIG. 2 may be implemented in software resident on routing computer 318. Communications interfaces of computer 318 when linked with IMDNI 116 may include a modem, network card, direct connection, or terminal connection. In this embodiment, preferably all data communication, security and message authentication and integrity confirmation as discussed above with regard to IMDNI 116 will be implemented on local computer 318. Communication between IMDNI 116, and central computer 220 may be implemented via network 230 or via direct connection. If IMDNI 116 is implemented on a computer such as a PC 318 of FIG. 3 with an IMDNI 116 transmitter/receiver peripheral device, a suitable pop-up message on the PC monitor may indicate a pending IMD 112 instruction or request, or an indicator on a display of the peripheral transmitter/receiver device 116 may indicate a pending instruction as above. (emphasis added).

Based upon the above quote, it appears that there are two possible interpretations that the Office Action may be using in an attempt to teach the software configured to report upon the integrity of a wireless communication link by performing (i), (ii), and (iii) of claim 1. First, the Office Action may be interpreting the "integrity confirmation" (highlighted above) as the software configured to report upon the integrity of a wireless communication link by performing (i), (ii), and (iii) of claim 1. However, Applicants respectfully submit that the "integrity confirmation" in the above quote of *Nelson* refers to ensuring the integrity of transmitted data (rather than the software that reports on the integrity of a wireless communication link by performing (i), (ii) and (iii) above). See, *Nelson*, column 5, lines 1 to 3; column 9, lines 49 to 67; column 12, line 1 to 56; and column 12, line 63 to column 14, line 15. That is, *Nelson* teaches confirming the integrity of data detected by an implanted medical device 112 ("IMD") and transmitted via a medical device network interface 116 ("IMDNI") to a computer 116. See, *Nelson*, column 9, lines 49 to 67. Such data "integrity confirmation" of *Nelson* includes (i) "encrypting or tunneling" of data "to ensure patient confidentiality" (See, *Nelson*, column 11, lines 62 to 56), (ii) "digital signatures", which "server to protect patient confidentiality", (iii) "biometric data" or (See, *Nelson*, column 13, lines 32 to 35) or, (iv) "firewalls 226 and 228" (See, *Nelson*, column 13, lines 55 to 59). However, none of these "integrity confirmation"

techniques taught by *Nelson* reports upon the integrity of a wireless link by: (i) sending a signal to the wireless link (ii) waiting a predetermined amount of time for a response to the signal, and (iii) generating a time-out output that indicates loss of the wireless link, as recited in claim 1. Indeed, the techniques taught by *Nelson* do not report upon the integrity of a wireless link by generating a message that indicates loss of a wireless link at all, but are instead methods to ensure data transmitted and stored in *Nelson* is secure. *Id.*

Alternatively, the Office Action may be interpreting the “pop-up message” or the “indicator” from the above quote of *Nelson* as the software configured to report on the integrity of a wireless communication link by performing (i), (ii), and (iii) of claim 1. However, as with the other interpretation, the “pop-up message” or “indicator” of *Nelson* does not signal or generate a signal (i.e., an output) that indicates loss of a wireless link. Instead, the message or indicator signals that instructions are pending. See, *Nelson*, column 20, lines 30 to 47.

Regarding the Office Action’s citation to column 19, line 62 to column 20, line 6 of *Nelson* (indicated at (b) above), the citation discloses:

Upon establishment of contact between IMDNI 116 and IMD 112, an instruction regimen may be pushed or generally transmitted to IMDNI 116. IMDNI 116 or equivalent may then store the results of processing or instruction carried out by remote interrogator 220, for example, as dictated by device agent server 224. The IMD 112 instruction regimen prescribed by central computer 116 may be stored within IMDNI 116 indefinitely or for a fixed period of time prior to expiration. At the next opportunity for communication between IMDNI 116 and IMD 112, IMDNI 116 provides new therapy programming, as well as new instructions for data collection if necessary. (emphasis added).

Applicants respectfully submit that nowhere does the above quote from *Nelson* disclose or even hint at reporting upon the integrity of a wireless link by: (i) sending a signal to the wireless link (ii) waiting a predetermined amount of time for a response to the signal, and (iii) generating a time-out output that indicates loss of the wireless link, as recited by claim 1. Instead, the above quote describes establishing a contact between the medical device network interface (“IMDNI”) 116 and implanted medical device (“IMD”) 112, and transmitting an instruction to the IMDNI 116. Applicants respectfully submit that the establishment of contact between IMDI 116 and IMD 112 and the data instruction transmission to IMDI 116 has nothing to do with reporting upon the integrity of a wireless link, let alone reporting upon the integrity of a wireless link by performing (i), (ii) and (iii) of claim 1.

Regarding the Office Action's citation to column 20 lines 48 to 57 of *Nelson* (indicated at (c) above), this citation of *Nelson* discloses:

If an IMD 112 instruction regimen has expired prior to establishment of contact with the target IMD 112, IMDNI 116 may send an error message identifying the IMD 112 and/or instruction regimen by a suitable code. Upon reception of an error in instruction regimen transmission, central computer 220 may be programmed to carry out suitable updating of an instruction regimen, or an error message may be output to remote devices 310, a human operator or clinician for direct intervention by voice telephony or direct contact by mobile clinical personnel, for example. (emphasis added).

The above-quoted passage discloses IMDI 116 sending an error message if an instruction regimen has expired and no contact has been established between the IMD 112 and the IMDNI 116. However, it does not disclose or suggest software that (i) sends a signal to a wireless link, (ii) waits for a response to the signal, and (iii) if a response to the signal is not received within a period of time, generates an output or message that indicates loss of a wireless link. Claim 1, on the other hand, includes (i) sending a signal to a wireless link (ii) waiting a predetermined amount of time for a response to the signal, and (iii) generating a time-out output that indicates loss of the wireless link when the response is not received within the predetermined amount of time. Indeed, there is no disclosure or suggestion in the above quote of software that generates an output that indicates loss of a wireless link at all, let alone software that is configured to report upon the integrity of a wireless link by performing (i), (ii) and (iii) of claim 1.

Applicants respectfully submit that *Causey* does not remedy the above-deficiencies of *Nelson*. That is, *Causey* also fails to disclose or suggest the system of claim 1 including a wireless remote device having software configured to report upon the integrity of a wireless link by: (i) sending a signal to the wireless link (ii) waiting a predetermined amount of time for a response to the signal sent to the wireless link, and (iii) generating a time-out output that indicates loss of the wireless link when the response is not received within the predetermined amount of time.

For at least the above reasons, Applicants respectfully submit that independent claim 1 and its dependent claims 2 to 9 and 13 to 17 are patentably distinguished over *Causey* and *Nelson*.

Independent claims 18, 33 and 44 include similar elements to independent claim 1. Applicants accordingly respectfully submit that for at least the reasons given above with respect

to independent claim 1, independent claims 18, 33 and 44 and their respective dependent claims 19 to 25, 29 to 50, and 58 are patentably distinguished over *Causey* and *Nelson*.

The patentability of independent claims 1, 18, 33 and 44 renders the separate obviousness rejections of claims 10 to 12, 26 to 28 and 51 to 53 over *Causey*, *Nelson*, *De la Huerga* and *Heinonen* moot.

In addition, Applicants respectfully submit that independent claim 44 and numerous dependent claims provide additional reasons for patentability over the applied prior art. For example, independent claim 44 and dependent claim 16 each include, "wherein an icon responsive to the time-out output is provided on the visual display." Similarly, dependent claim 17, includes, in part, "wherein a pop-up window is provided on the visual display in response to the time-out output." Page 8 of the Office Action states:

With respect to Claim 16 . . . Causey et al disclose further wherein an icon responsive to the time-out output is provided on the visual display ('533; Fig. 22: time output).

...

With respect to Claim 17, . . . Causey, III. et al. discloses further wherein a pop-up window is provided on the visual display in response to the time out ('533, Figs. 22 & 24 pop-up window showing time).

Figs. 22 and 24 of *Causey* (cited in to in the above quotes at page 8 of the Office Action) are reproduced below.

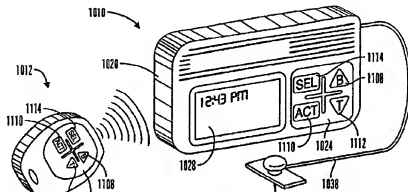


FIG. 22

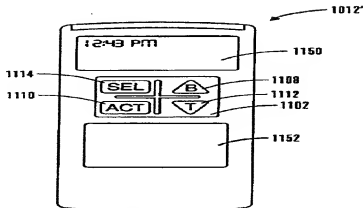


FIG. 24

Applicants respectfully submit that *Causey* does not disclose or even hint that either the RF programmer 1012 (Fig. 22) or the RF programmer 1012' (Fig. 24) above includes (i) an icon responsive to a time-out output or (ii) a pop-up window provided on the displays 1028 or 1150 respectively, as required by independent claim 44 (and claim 16) and claim 17, respectively. The only device in *Causey* that includes any type of timing feature whatsoever is the RF receiver, as referred to column 11, line 65, to column 12, line 4, which states, "the receiver will remain in an active mode until a complete sequence of commands has been received, or until the receiver times out due to a lack of RF communications from the RF programmer." However, nowhere does this passage of *Causey* describe that the RF receiver has an icon responsive to the time-out output, or a pop-up window provided on a visual display in response to the claimed time-out output. Further, as discussed above, *Nelson* fails to disclose the software configured to generate time-out output that indicates loss of a wireless link of claim 1. Applicants accordingly respectfully submit that it would not have been obvious to modify *Causey*'s RF programmer 1012 or 1012' in view of *Nelson*, to include an icon or pop-up window responsive to a time-out, without reasonably being construed as impermissible hindsight reconstruction.

For at least the above reasons, Applicants respectfully submit that independent claim 44 and dependent claims 16 and 17 are additionally patentably distinguished over the applied prior art. Dependent claims 31, 32, 42 and 43 include similar elements to independent claim 44 and dependent claims 16 and 17. Accordingly, for at least the reasons given above with respect to independent claim 44 and dependent claims 16 and 17, Applicants respectfully submit that dependent claims 31, 32, 42 and 43 are also additionally patentably distinguished over *Causey* and *Nelson*.

For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

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